

**Videocon Telecommunications Limited**  
*Response to TRAI Consultation Paper on*  
**“National Broadband Plan” dated 10<sup>th</sup> June 2010**

## **INTRODUCTION**

The telecommunication services have become necessity in today’s world. The sector has seen rapid advancement since its liberalization. Studies have revealed that a 10% increase in mobile broadband penetration leads to a GDP increase of upto 1.4%.

The broadband penetration in India is low despite the fact that 104 service providers are serving broadband services. The net broadband addition per month is just 0.1 to 0.2 million in contrast to 18 million mobile connections per month. The broadband penetration is just 0.74% when compared with teledensity of 52.74%.

However, modern India, has acknowledged that broadband will act as a catalyst for growth, social integrity and economic development of the country

For urban India, broadband will offer the convenience of mobility with rich multimedia applications, downloads, streaming and data transfers whereas Rural India will really be benefited with services like health care, education, e-governance, etc thus tapering the “Digital Divide” leading to improved productivity in rural areas thus ensuring quality of life in rural India.

It is necessary to provide high data rate services and quality to the broadband consumer in mobile environment as they have today in wired office or home environments. 3G and BWA auctions have recently concluded. We believe that in coming months with launch of technologies such as HSPA and LTE India will witness “Mobile Broadband” revolution.

Videocon submission to TRAI’s consultation paper on **“National Broadband Plan”** dated 10<sup>th</sup> June 2010 is as:

### **I. BROADBAND – DEMAND & SUPPLY**

#### **(A) Facts**

India with a total population of 1.155 billion (May 2010) has only 13.54 million internet subscribers of which only 8.59 million are broadband users (figures as on March 2010).

The broadband penetration in India is alarmingly low with only 0.1 to 0.2 million additions per month as compared to 16-18 million mobile connections additions per month.

### **Key Drivers for Increase in Broadband demand**

**Introduction of Wireless Broadband Technologies:** Presently in India provisioning of broadband using DSL technology is prominent wherein existing fixed lines infrastructure is being utilized for providing connections to end customers. Use of wireless technologies to be promoted for providing broadband and frequencies in various bands as recommended by ITU to be refarmed for Wireless Broadband

- 700 MHz band (698-806 MHz) should be harmonized on priority for LTE services as being at lower frequency band; it is most suited for rural broadband coverage.
- The 900 MHz band is very valuable for providing 3G and LTE services. The same should be refarmed for spectrum efficient and/or future technologies.
- Refarming of 2.5 GHz band for broadband.

**Tariffs:** The entry level price per megabit in India, although has come down drastically from Rs 1500 in 2004 to Rs 200 (USD 4.16 approx) in 2007, is still higher than most countries.

- To ensure the penetration of broadband in Rural India subsidy to be provided to telecom operators to ensure that services can be provided at nominal rates in rural India.

**CPE Cost:** The cost of CPE in India is relatively higher as compared to other countries. This acts as one of major hindrance towards increasing broadband penetration.

- The existing projections and targets have taken a limited view and there is a need to expand the scope of broadband to consider the potential of wireless technologies. The current targets of 48 Mn connections by 2012 and 100 Mn connections by 2014 are conservative and take into account only the growth of PCs. It needs to be noted that it would be economically prohibitive for every household to own a device with form factor of a desktop / laptop. However, owning a device with form factor of a smartphone (a fraction of PC's cost) will be much higher This also becomes relevant from the perspective that smartphones would offer user the ability to interface with the device operating system through icon based touch screen based interfaces which do not require significant computer or English language understanding. It also needs to be noted that mobile handsets have wide software development ecosystem and the business models are mature which make the software management

relatively easy and enable the OEMs to offer phones at costs which are significantly lower than that of a PC

**Content:** The content that is available today on the Internet is largely in English and is not customized as per local needs and diversity.

- India poses a unique challenge in terms of diversity in languages spoken. Though Hindi is the official language, a large population of India is not well conversant in the same. There are 22 constitutionally approved languages spoken in India and over 1600 regional dialects. Most languages have their own script. Almost every state in India has more than one dialect. To ensure an end-to-end local language delivery, Applications (web browsing, messaging etc) as well as Content need to be provisioned in local languages.

## **II. National Broadband Network**

**“Technology Neutral Approach”** to be adopted to achieve **“National Broadband Objective”**. Broadband Technologies like EV-DO, HSPDA, 3G, WiMAX and LTE would be able to offer higher data rates over existing wireless technologies. Considering the need for broadband technologies in backhaul and access areas, we recommend that the Indian government should make plans for release of additional spectrum especially in the 450MHz, 1900 MHz, and 2.5 GHz to support the broadband growth. The 900 MHz band is very valuable for providing 3G and LTE services. The same should be refarmed for spectrum efficient and/or future technologies. Further spectrum in 2.1GHz should be released for commercial broadband applications.

Network topology should be based on the principle of efficient utilization of various types of available infrastructure. This can be achieved by combining wireless technologies with the fiber based network. The service providers should be incentivized to roll out fiber based networks.

Since large part of the cost of deploying fiber networks is in form of RoW and exorbitant levies are being imposed by various municipalities, there is a need to have appropriate policies in place for ensuring access to right of way at reasonable prices, and preferably at no charge to facilitate broadband services to the public.

DoT should take lead in ensuring that RoW procedures are in line with the National Telegraph Act. DoT should re-emphasize and re-state its RoW guidelines and coordinate with various State governments for its uniform implementation.

It is a well recognized fact that broadband penetration in rural areas is lagging behind. The urgent need right now is to catalyze and accelerate the growth of Broadband in rural areas. The benefit of connecting the rural goes well beyond basic telecommunications. Greater broadband connectivity to the Internet promotes distance learning, E-Learning, E-Governance, E-Health applications. A study by GSM Association, based on a survey in 57 countries concluded that a 10 per cent increase in mobile phone penetration leads to a 1.2 per cent rise in annual GDP. In India, UAS Licensees have established considerable wireless infrastructure in rural

areas. There is a strong case of leveraging this infrastructure for provisioning of rural broadband. Not only will this reduce roll-out time but will also rationalize the Capex requirement.

There is a need to revise the current definition of Broadband to accommodate the provision of services on a wireless platform.

USOF should devise attractive schemes for rural broadband to enable broadband connectivity in rural areas. The details of the schemes could be worked out by USOF and UAS Licensees.

### **III. Regulatory Challenges and Future Approach**

The Broadband Policy of 2004 defines broadband as:

“An **‘always-on’** data connection that is able to support interactive services including Internet access and has the capability of the minimum download speed of 256 kilo bits per second (kbps) to an individual subscriber from the Point Of Presence (POP) of the service provider intending to provide Broadband service where multiple such individual Broadband connections are aggregated and the subscriber is able to access these interactive services including the Internet through this POP. The interactive services will exclude any services for which a separate license is specifically required, for example, real-time voice transmission, except to the extent that it is presently permitted under ISP license with Internet Telephony.”

In this perspective, the words **“Always on”** could restrict wireless based high speed internet connections from being classified as Broadband. In this age of information technology where growth of the internet is anticipated to be driven mainly by wireless access such as 3G and BWA technologies, the current definition may be highly restrictive. ***There is a need to define wireline and wireless broadband separately so as to avoid inclusion of clauses which favor wireline over wireless.***

DoT has circulated draft model guidelines for ROW in 2005, clearly stating that that all State governments should extend the facility of rights of way for laying underground Telecom cables to all licensees without levying any compensatory charges / levy /lease rentals /license fee or imposing free bandwidth requirements or asking for revenue share/ cashless equity etc. There is also a clear statement that the only admissible charges are reinstatement charges or charges directly linked to the restoration work. Re-emphasize and reiterate the RoW guidelines and coordinate with various State Governments for its uniform implementation to facilitate Telecom growth at affordable tariffs. This would ensure that discrepancies in costs incurred and tariffs levied by various state governments are eliminated.

- The RoW permission should be granted **“ON PRIORITY”**. Any denial to RoW in exceptional circumstances should be recorded in writing with reasons
- The local Authority should only levy restoration charges. There should be no rental or any recurring charges leviable in any form.

- Service providers should only be directed to restore the dug up portion to its original state to the satisfaction of the local authorities.
- Avoid various civic authorities from taking arbitrary and sudden decisions asking telecom companies to remove tower installations. Even where it is necessitated such action be taken giving due notice with reasonable time to shift.
- The cable laying process should be made an integral part of the Jawaharlal Nehru Urban Renewal Mission and other road infrastructure / NHAI projects; this would ensure a permanent RoW removing multiple levels of erratic levies, better infrastructure planning and also establish the position of Telecom as an essential public utility service.
- Broadband and In-building solutions installation can be included in the building laws

Expansion by large number of players is restricted due to high CAPEX involved in deployment of infrastructure and also due to difficulties in obtaining ROW. While the recent 3G and BWA auctions would help in promoting competition, there is also need to further increase competition which can be achieved by releasing more wireless spectrum for broadband commercial applications.

India's broadband cost is ~3.7 times more expensive as compared to cellular, primarily due to the higher operational and service provisioning costs.

Broadband market (especially wireless) has a large number of players and with 3G / BWA licenses the number of service providers is likely to further increase. Given the large number of players and competitiveness, there is an urgent requirement for price regulations to achieve TRAI's objective of consumer centric approach.